



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/604,426 | 07/21/2003 | Tsung-Huei Ren | ALIP0006USA | 1425 |
| 27765 | 7590 | 02/22/2006 | EXAMINER | |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116 | | | LAMB, CHRISTOPHER RAY | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2656 | | |
| DATE MAILED: 02/22/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|-----------------|--------------|
| | 10/604,426 | REN ET AL. |
| Examiner | Art Unit | |
| Christopher R. Lamb | 2656 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Statyus

1) Responsive to communication(s) filed on 15 October 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2 and 4-12 is/are rejected.

7) Claim(s) 3 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 21 July 2003 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because of the typographical error in line 9 ("anda" should be "and a"). Correction is required. See MPEP § 608.01(b).
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Optical Recording System with a Built-In Jitter Detector."

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed limitation, wherein the step is "configured according to parameters and arithmetic formula," is so general that it could mean almost anything, and thus does not distinctly claim the subject matter of the invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 and 4-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakajima et al. (U.S. Patent Application Publication 2001/0006500 A1).

Regarding claim 1, Nakajima et al. discloses an optical recording system for burning an optical disc (Fig. 1), the optical recording system comprising:

a housing (Nakajima does not specifically disclose a housing, but it is inherent);

a laser pickup installed inside the housing for writing data onto the optical disc (Fig. 1: 28) according to a write strategy (paragraph 64) and reading an RF signal from the optical disc (paragraph 65);

a laser drive installed inside the housing connected to the laser pickup for controlling operations of the laser pickup (Fig. 1: 42);

a read channel installed inside the housing connected to the laser pickup for processing the RF signal received by the laser pickup (paragraph 66);

a jitter meter installed inside the housing connected to the read channel for generating delay signals according to the processed RF signal (Fig. 1: 38; or Fig. 10);

and a digital signal processor installed inside the housing connected to the laser drive and the jitter meter for receiving the delay signals, configuring the write strategy according to the delay signals, and controlling the laser drive to control the laser pickup

to write data onto the optical disc according to the configured write strategy (paragraph 72).

Regarding claim 2, Nakajima et al. discloses wherein the jitter meter comprises:

- a delay chain comprising a plurality of delay cells connected in a cascade manner, each delay cell delaying an input signal a time unit (Fig. 10: DFF₁₁ to DFF₁₅);
- a buffer set connected to the delay chain for storing a delay signal received from the delay chain (Fig. 10: DFF₁₆; paragraph 113: DFF₁₆ “accumulates,” or stores, the delay signal); and
- a control unit connected to the read channel and the buffer set for outputting a control signal according to a standard clock and the processed RF signal (paragraphs 113-114).

Regarding claim 4, in Nakajima et al. each of the delay cells is a flip-flop (apparent from Fig. 4).

Regarding claim 5, in Nakajima the flip-flop is either rising-edge triggered or falling-edge triggered (Nakajima does not specifically discuss the trigger, but edge triggering is an inherent property of a flip-flop).

Regarding claim 6, in Nakajima the optical disc comprises a lead-in area, the process RF signal sent to the jitter meter being generated from an RF signal read from the lead-in area of the optical disc (Nakajima does not use this terminology, but does disclose that the RF signal comes from a “predetermined area” on the disc, which is equivalent: paragraph 5).

Regarding claim 7, Nakajima discloses firmware for storing parameters (Nakajima's apparatus has prestored parameters: paragraph 64) and arithmetic formula (the optical disk controller performs calculations, so must have prestored arithmetic formulas: paragraph 73).

Regarding claims 8-9 and 11-12, these are method claims corresponding to the apparatus of claims 1-2 and 6-7, and are rejected for the same reasons.

Regarding claim 10, in Nakajima the delay signal is formed by a plurality of delay bits (in Fig. 10, the delay signal is delayed by DFF₁₁ through DFF₁₅: these are also depicted in Fig. 4, where it is apparent that they have a plurality of bits).

Allowable Subject Matter

8. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

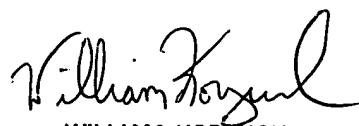
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ishibashi et al. (U.S. Patent 5,663,942), Kobayashi et al. (U.S. Patent 6,333,905),

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572) 272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CRL 2/17/06



WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2300